

AMENDMENT

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-43 (withdrawn)

Claim 44 (original): A method of preparing a photochromic polycarbonate lens, the method comprising: providing a polycarbonate lens blank; applying a tie coating composition to the lens blank, the tie coating composition comprising a methacrylate monomer, a (meth)acrylated oligomer with a polycarbonate backbone, a urethane methacrylate oligomer, and a solvent; allowing the solvent to evaporate to form a tie coating layer; partially polymerizing the tie coating layer; applying a photochromic matrix layer composition to the tie coating layer, the photochromic matrix layer composition comprising a monomer mixture comprising a flexible hydrophilic dimethacrylate monomer, a hydrophobic monomer, a flexible hydrophobic multi(meth)acrylate monomer, and a urethane methacrylate oligomer, wherein the multi(meth)acrylate monomer contains three or more methacrylate groups or acrylate groups; and a photochromic dye; and polymerizing the tie coating layer and the photochromic matrix layer composition to prepare a photochromic polycarbonate lens.

Claim 45 (original): The method of claim 44, wherein the applying a tie coating composition step comprises flow coating, dip coating, or spin coating.

Claim 46 (original): The method of claim 44, wherein the applying a tie coating composition step comprises spin coating.

Claim 47 (original): The method of claim 44, wherein the tie coat layer is about 8 microns to about 16 microns in thickness.

Claim 48 (original): The method of claim 44, wherein the partially polymerizing step comprises exposing the tie coating layer to UV light of about 600 mJ/cm² to about 2000 mJ/cm².

Claim 49 (original): The method of claim 44, wherein the partially polymerizing step comprises exposing the tie coating layer to UV light of about 800 mJ/cm² to about 1300 mJ/cm².

Claim 50 (original): The method of claim 44, comprising applying two or more tie coating layers to the lens blank.

Claim 51 (currently amended): The method of claim 44, further comprising drying the lens blank ~~and tie coating layer~~ by exposure to a radiant IR source, prior to the step of applying the tie coating layer.

Claim 52 (currently amended): The method of claim 44, further comprising drying the lens blank ~~and tie coating layer~~ by heating to about 120° F. (49° C.) to about 200° F. (93° C.) prior to the step of applying the ~~photochromic matrix layer composition~~ tie coating layer.

Claim 53 (original): The method of claim 52, wherein the heating step is performed in a dry air atmosphere or a nitrogen atmosphere.

Claim 54 (original): The method of claim 44, further comprising heating the photochromic matrix composition to about 120° F. (49° C.) to about 150° F. (66° C.) prior to the step of applying the photochromic matrix layer composition to the tie coating layer.

Claim 55 (original): The method of claim 44, further comprising placing the lens blank in a pmold after the partially polymerizing step and prior to applying the photochromic matrix layer,

wherein the mold contains a gasket or tape having a liquid tight seal when placed on the concave side of the mold.

Claim 56 (currently amended): A method of preparing a photochromic polycarbonate lens, the method comprising: providing a polycarbonate lens blank; applying a tie coating composition to the lens blank, the tie coating composition comprising a methacrylate monomer, a (meth)acrylated oligomer with a polycarbonate backbone, a urethane methacrylate oligomer, and a solvent; allowing the solvent to evaporate to form a tie coating layer; partially polymerizing the tie coating layer; providing a mold; applying a photochromic matrix layer composition ~~to the tie coating layer in~~ into the mold, the photochromic matrix layer composition comprising a monomer mixture comprising a flexible hydrophilic dimethacrylate monomer, a hydrophobic monomer, a flexible hydrophobic multi(meth)acrylate monomer, and a urethane methacrylate oligomer, wherein the multi(meth)acrylate monomer contains three or more methacrylate groups or acrylate groups; and a photochromic dye; contacting the tie coating layer and photochromic matrix layer; and polymerizing the tie coating layer and the photochromic matrix layer composition to prepare a photochromic polycarbonate lens; and removing the photochromic polycarbonate lens from the mold.

Claim 57 (new): The composition of claim 44, wherein the solvent comprises a ketone.

Claim 58 (new): The composition of claim 57, wherein the solvent is a solvent mixture.

Claim 59 (new): The composition of claim 58, wherein the solvent is a mixture of isopropyl alcohol and methyl ethyl ketone.